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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,220	07/06/2000	Scott Arouh	DIA 0002P	4817

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EXAMINER	
ALLEN, MARIANNE P	
ART UNIT	**PAPER NUMBER**
1631	9

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/611,220	AROUH ET AL.	
	Examiner	Art Unit	
	Marianne P. Allen	1631	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 March 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☒ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *none*.

   Claim(s) objected to: *none*.

   Claim(s) rejected: *10,14 and 15*.

   Claim(s) withdrawn from consideration: *9*.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *See Continuation Sheet*

Marianne P. Allen

Marianne P. Allen
Primary Examiner
Art Unit: 1631

Continuation of 2. NOTE: The proposed cancellation of claim 9 results in pending claims 14 and 15 being dependent upon a cancelled claim.

Continuation of 10. Other: The replacement page previously submitted was not entered as the required marked up copy was not provided. Applicant is directed to the prior Office action. In addition, applicant's representation of the text present on pages 61-62 is inaccurate. Page 61 of the specification as filed ends with the text "iden" not "identified." See attached pages.

functionally similar for a majority of clinical outputs yields a method of predicting the effects of given drugs on clinical outputs of interest, as described in the section entitled "Use for Prediction of Drug Efficacies." We use this method to predict the effect of each of a pair of drugs on a given clinical output. This clinical measure may be a drug efficacy measure: for example, a combination of the extent of reduction of problematic symptoms or of the lack of specified side effects. We then compare this clinical measure for a given patient for each of the two drugs. If the clinical measure is a cost of treatment (such as a financial cost or a measure of patient suffering from side effects), a drug minimizing this cost may be chosen.

6.5 Use for Choosing Optimal Drugs for a Given Patient

The above comparison of drug efficacies allows the development of an automated technique for choosing optimal drugs for a given patient. A given patient's genome is first scanned and the problematic genomic inputs (such as problematic alleles) iden

tified

(as those elements of the genomic inputs that are also present in the universal functional categories). A software program then identifies which drug is expected to perform the best on the patient's set of problematic inputs. The program does this by comparing the effectiveness of different drugs on the problematic inputs found in the given patient.

7. Conclusion

In accordance with the preceding explanation it should now be understood that the present invention embodies new, neural-network-based, methods of identifying and relating particular alleles -- out of a vast number of alleles present in the genomic sequences of each of a large number of individual organisms -- that are relevant in a practical sense to (i) some particular biological or sociological problem, normally disease, afflicting or besetting the organisms, and, separately, to (ii) various therapies, normally drugs but also including environmental changes, that may be applied to the